



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

ORGANIZED 1878

INCORPORATED 1891

JULY
1913

VOLUME XXXII

No. 3

TRANSACTIONS
OF THE
AMERICAN
MICROSCOPICAL
SOCIETY

PUBLISHED QUARTERLY BY THE
AMERICAN MICROSCOPICAL SOCIETY
DECATUR, ILLINOIS

ANNUAL SUBSCRIPTION \$3.00

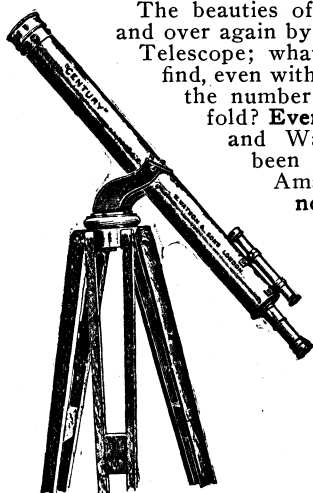
SINGLE COPY \$1.00

DOUBLE NUMBERS \$2.00

ASTRONOMY

WITH and WITHOUT A TELESCOPE

Estimated number of stars visible without telescope 3,000.
Estimated number of stars visible with Watson's 3-inch telescope 324,000.—SIR R. BALL.



The beauties of the heavens have been adored over and over again by those who have never seen through a Telescope; what must be the attitude of those who find, even with a 3-inch Watson's Century Telescope, the number of visible stars increased a hundred fold? **Every household should have a Telescope**, and Watson's "Century" Instruments have been specially designed for the use of the Amateur, for no Observatory is necessary, and they are easily carried. Also the Objectives are of the celebrated Watson-Conrady Series, Type III., giving the finest possible optical effect.

PRICES—

Watson-Conrady Telescope, on Tripod Stand, with Finder, as figured, with two Astronomical and one Terrestrial Eyepieces, Dew Cap, and Case for Telescope, of best construction throughout—

Aperture of Object Glass

Aperture of Object Glass		Price
3 inch	- -	\$ 85.20
3½ inch	- -	1 21.80
4 inch	- -	1 75.30
5 inch	- -	2 50.80
6 inch	- -	3 77.40

WATSON'S EDUCATIONAL TELESCOPE

Of new and most convenient design, with first-rate Object Glass, 3 inches diameter, on table tripod Stand, with Astronomical Eyepiece \$35.80. Unequalled value. Strongly recommended for beginners.

Specifications and designs for **Equatorial Mountings** suitable for above Telescopes, together with full particulars of all our models will be found in Catalogue No. 6K, post free on application.

SECOND-HAND ASTRONOMICAL TELESCOPES

A large assortment by leading makers always on hand. List published monthly.

W. WATSON & SONS, Ltd.

Established 1837

Manufacturers of Microscopes and Telescopes — Wholesale and Retail.

Contractors to the British Admiralty, War Office, India Office, &c.,

313, HIGH HOLBORN, LONDON, W. C., ENGLAND

Members and Friends Should Patronize Our Advertisers

TRANSACTIONS
OF THE
American Microscopical
Society

ORGANIZED 1878 INCORPORATED 1891

PUBLISHED QUARTERLY

BY THE SOCIETY

EDITED BY THE SECRETARY

VOLUME XXXII

NUMBER THREE

Entered as Second-class Matter December 12, 1910, at the Postoffice at Decatur, Illinois, under act of March 3, 1879.

DECATUR, ILL.
REVIEW PRINTING & STATIONERY CO.
1913

The Society does not hold itself responsible for the opinions expressed by members in its published *Transactions* unless endorsed by special vote.

TABLE OF CONTENTS

FOR VOLUME XXXII, Number 3

The Spencer-Tolles Fund: Grants to be Made From it, by the Committee	165
Notes on the Trematode Genus <i>Clinostomum</i> , with Plate IX, by William Walter Cort	169
Notes, Reviews, Etc.—1. Notes on Rhizopods from Michigan; 2. Speculations on the Nature of the Olfactory Organs; 3. <i>Vaginicola</i> , an Interesting Protozoan; 4. An Inorganic Cell, by E. W. Roberts (with Plates X-XII). Polyembryony in the Nine-banded Armadillo; Persistence of <i>Bacillus abortivus</i> in Tissues; Persistence of Tubercle Bacilli in Cultures; Cambium Growth in American Larch; Cell-division in the Sex Cells of <i>Taenia</i> ; Demonstration of Brownian Movement; Fresh-water Diatoms and Their Preparation; Mounting Fresh-water Algae; Mounting <i>Volvox</i> ; Counting Leucocytes in Cerebro-spinal Fluid; Toxic Secretions of Infusoria; Relations of Cell Size and Nuclear Size in <i>Oxytricha</i> ; Influence of Mating in <i>Paramecia</i> ; Amitotic Division in Ciliated Cells; Spermatogenesis in Silkworms; Education of Infusoria in Ingestion of Food; Spirostyle in Spermatozoa; Nerve Fibrils in Dentine; Succession in Fungi; Rusts and their Host Tissues; Physiological Effects of Bordeaux Mixture; Hermaphroditism in <i>Amphioxus</i> ; Resistance in Hibernating Animals; Microscopic Measurements by Camera Lucida; Micro-radiography; Circulation by Convection Currents in Laboratory Aquaria; Simple Histological Methods; Reducing Stock Solutions; Laboratory Guide in Parasitology; Prevention and Control of Disease	183